

WHAT IS CLAIMED IS:

1. A server apparatus which inputs a print job including an insert mark set in an information processing apparatus and PDL data of documents of which  
5 a specified page is previously marked by the insert mark from at least one or more information processing apparatuses connected on a network and transfers print image data to an image processing apparatus for  
10 executing predetermined image processing according to a communication performed between a scanner unit and a printer unit, comprising:
  - development means for sequentially developing the PDL data of each page included in the print job to be input into the print image data;
  - 15 storage means for storing each of the print image data developed by said development means;
  - judgment means for judging whether or not each page of the print job is an insert page to which image data externally input is inserted, by comparing the  
20 insert mark set in the print job with the PDL data of each page in the print job;
  - creation means for creating job management information, which includes page management information including information of linking the each page of the  
25 print job with each of the print image data stored in said storage means and information of indicating whether or not the each page of the print job is the

insert page, and a job ID of specifying the print job,  
for each job to be input;

hold means for holding a job management table  
including the job management information for each of  
the jobs;

list transfer means for transferring a job  
selection list, which is created with reference to the  
job management table on the basis of a job selection  
list obtaining request from the image processing  
apparatus, to the image processing apparatus;

page judgment result transfer means for  
transferring a result indicating whether or not a  
designated page of a designated print job is the insert  
page to the image processing apparatus with reference  
to the job management table in accordance with inquires  
from the image processing apparatus; and

image transfer means for transferring print image  
data, which corresponds to a designated page of a job  
designated in an image data obtaining request and is  
uniquely selected from said storage means with  
reference to the job management table on the basis of  
the image data obtaining request from the image  
processing apparatus, to the image processing  
apparatus.

2. An apparatus according to claim 1, wherein the  
print job input from the image processing apparatus





4. An apparatus according to claim 3, wherein the  
print job input from the image processing apparatus  
includes a user ID used in specifying the information  
processing apparatus, and the job management  
5 information includes a user ID corresponding to the  
print job.

5. An image processing apparatus, which executes  
predetermined image processing according to a  
10 communication performed between a scanner unit and a  
printer unit, capable of communicating with a server  
apparatus which generates image data by obtaining a  
print job communicating with at least one or more  
information processing apparatuses connected on a  
15 network and analyzing the obtained print job,  
comprising:

issuance means for issuing a job selection list  
obtaining request used in selecting print jobs being  
managed for the server apparatus;

20 selection means for selecting any of the print  
jobs by displaying a job selection list transferred  
from the server apparatus in response to the job  
selection list obtaining request issued by said  
issuance means; and

25 control means for switching and controlling a  
print process in which, for each of pages of the  
selected print job, it is sequentially inquired whether

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or not the pages are insert pages for the server apparatus and an image data obtaining request is issued for the server apparatus in accordance with the inquired result, then print image data transferred from the server apparatus is output using the printer unit and a copying process in which an image input of insert originals is performed in real time by the scanner unit, then image data is output using the printer unit.

10 6. An apparatus according to claim 5, wherein an original feed device for feeding plural insert originals in the order of those originals to the scanner unit is provided,

15 wherein said control means causes the original feed device to feed the insert originals and performs the image input of the insert originals by the scanner unit.

20 7. An apparatus according to claim 5, wherein the job selection list is displayed including a job ID corresponding to each of the print jobs.

25 8. An apparatus according to claim 5, wherein the job selection list is displayed including a user ID corresponding to each of the print jobs.

9. An image processing apparatus, which executes

predetermined image processing according to a communication performed between a scanner unit and a printer unit, capable of communicating with a server apparatus which generates image data by obtaining a print job communicating with at least one or more information processing apparatuses connected on a network and analyzing the obtained print job, comprising:

issuance means for issuing a job selection list obtaining request used in selecting print jobs being managed for the server apparatus;

selection means for selecting any of the print jobs by displaying a job selection list transferred from the server apparatus in response to the job selection list obtaining request issued by said issuance means; and

control means for transferring input image data to the server apparatus by executing processing in which, for each of pages of the selected print job, it is sequentially inquired whether or not the pages are insert pages for the server apparatus, and an image input of insert originals is performed by the scanner unit in accordance with the inquired result.

10. An apparatus according to claim 9, wherein an original feed device for feeding plural insert originals in the order of those originals to the

scanner unit is provided,

wherein said control means causes the original feed device to feed the insert originals and performs the image input of the insert originals by the scanner unit.

11. An apparatus according to claim 9, wherein the job selection list is displayed including a job ID corresponding to each of the print jobs.

12. An apparatus according to claim 9, wherein the job selection list is displayed including a user ID corresponding to each of the print jobs.

13. A control method of a server apparatus which inputs a print job including an insert mark set in an information processing apparatus and PDL data of documents of which a specified page is previously marked by the insert mark from at least one or more information processing apparatuses connected on a network and transfers print image data to an image processing apparatus for executing predetermined image processing according to a communication performed between a scanner unit and a printer unit, said method comprising:

a development step of sequentially developing the PDL data of each page included in the print job to be



input into the print image data;

a storage step of storing each of the developed print image data into a memory;

5 a judgment step of judging whether or not each page of the print job is an insert page to which image data externally input is inserted, by comparing the insert mark set in the print job with the PDL data of each page in the print job;

10 a creation step of creating job management information, which includes page management information including information of linking the each page of the print job with each of the print image data stored in the memory and information of indicating whether or not the each page of the print job is the insert page, and  
15 a job ID of specifying the print job, for each job to be input, and creating a job management table including the job management information for each of the jobs;

20 a list transfer step of transferring a job selection list, which is created with reference to the job management table on the basis of a job selection list obtaining request from the image processing apparatus, to the image processing apparatus;

25 a page judgment result transfer step of transferring a result indicating whether or not a designated page of a designated print job is the insert page to the image processing apparatus with reference to the job management table in accordance with inquiries

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from the image processing apparatus; and

an image transfer step of transferring print image data, which corresponds to a designated page of a job designated in an image data obtaining request and is uniquely selected from the memory with reference to the job management table on the basis of the image data obtaining request from the image processing apparatus, to the image processing apparatus.

10           14. A control method of a server apparatus which inputs a print job including an insert mark set in an information processing apparatus and PDL data of documents of which a specified page is previously marked by the insert mark from at least one or more  
15           information processing apparatuses connected on a network and transfers print image data to an image processing apparatus for executing predetermined image processing according to a communication performed between a scanner unit and a printer unit, said method  
20           comprising:

          a development step of sequentially developing the PDL data of each page included in the print job to be input into the print image data;

          a storage step of storing each of the developed  
25           print image data into a memory;

          a judgment step of judging whether or not each page of the print job is an insert page to which image

data externally input is inserted, by comparing the insert mark set in the print job with the PDL data of each page in the print job;

a creation step of creating job management information, which includes page management information including information of linking the each page of the print job with each of the print image data stored in the memory and information of indicating whether or not the each page of the print job is the insert page, and a job ID of specifying the print job, for each job to be input, and creating a job management table including the job management information for each of the jobs;

a list transfer step of transferring a job selection list, which is created with reference to the job management table on the basis of a job selection list obtaining request from the image processing apparatus, to the image processing apparatus;

a page judgment result transfer step of  
transferring a result indicating whether or not a  
20 designated page of a designated print job is the insert  
page to the image processing apparatus with reference  
to the job management table in accordance with inquires  
from the image processing apparatus; and

an image link step of storing the image data  
25 transferred from the image processing apparatus into  
the memory and updating the page management information  
of the corresponded page so as to link the stored image

data with the designated page of the designated print  
job.

15. A control method of an image processing  
5 apparatus, which executes predetermined image  
processing according to a communication performed  
between a scanner unit and a printer unit, capable of  
communicating with a server apparatus which generates  
image data by obtaining a print job communicating with  
10 at least one or more information processing apparatuses  
connected on a network and analyzing the obtained print  
job, said method comprising:

an issuance step of issuing a job selection list  
obtaining request used in selecting print jobs being  
15 managed for the server apparatus;

a selection step of selecting any of the print jobs by displaying a job selection list transferred from the server apparatus in response to the job selection list obtaining request; and

20 a switching step of switching a print process in which, for each of pages of the selected print job, it is sequentially inquired whether or not the pages are insert pages for the server apparatus and an image data obtaining request is issued for the server apparatus in

25 accordance with the inquired result, then print image data transferred from the server apparatus is output using the printer unit and a copying process in which

an image input of insert originals is performed in real time by the scanner unit, then image data is output using the printer unit.

5           16. A control method of an image processing apparatus, which executes predetermined image processing according to a communication performed between a scanner unit and a printer unit, capable of communicating with a server apparatus which generates  
10 image data by obtaining a print job communicating with at least one or more information processing apparatuses connected on a network and analyzing the obtained print job, said method comprising:

an issuance step of issuing a job selection list  
15 obtaining request used in selecting print jobs being managed for the server apparatus;

a selection step of selecting any of the print jobs by displaying a job selection list transferred from the server apparatus in response to the job  
20 selection list obtaining request; and

a transfer step of transferring input image data to the server apparatus by executing processing in which, for each of pages of the selected print job, it is sequentially inquired whether or not the pages are  
25 insert pages for the server apparatus, and an image input of insert originals is performed by the scanner unit in accordance with the inquired result.

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a creation step of creating job management information, which includes page management information including information of linking the each page of the print job with each of the print image data stored in the memory and information of indicating whether or not

the each page of the print job is the insert page, and a job ID of specifying the print job, for each job to be input, and creating a job management table including the job management information for each of the jobs;

5           a list transfer step of transferring a job selection list, which is created with reference to the job management table on the basis of a job selection list obtaining request from the image processing apparatus, to the image processing apparatus;

10           a page judgment result transfer step of transferring a result indicating whether or not a designated page of a designated print job is the insert page to the image processing apparatus with reference to the job management table in accordance with inquires from the image processing apparatus; and

15           an image transfer step of transferring print image data, which corresponds to a designated page of a job designated in an image data obtaining request and is uniquely selected from the memory with reference to the job management table on the basis of the image data obtaining request from the image processing apparatus, to the image processing apparatus.

25           18. A computer-readable storage medium which stores programs used for executing steps in a control method of a server apparatus which inputs a print job including an insert mark set in an information

processing apparatus and PDL data of documents of which  
a specified page is previously marked by the insert  
mark from at least one or more information processing  
apparatuses connected on a network and transfers print  
5 image data to an image processing apparatus for  
executing predetermined image processing according to a  
communication performed between a scanner unit and a  
printer unit, comprising:

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10 a development step of sequentially developing the  
PDL data of each page included in the print job to be  
input into the print image data;

a storage step of storing each of the developed  
print image data into a memory;

15 a judgment step of judging whether or not each  
page of the print job is an insert page to which image  
data externally input is inserted, by comparing the  
insert mark set in the print job with the PDL data of  
each page in the print job;

20 a creation step of creating job management  
information, which includes page management information  
including information of linking the each page of the  
print job with each of the print image data stored in  
the memory and information of indicating whether or not  
the each page of the print job is the insert page, and  
25 a job ID of specifying the print job, for each job to  
be input, and creating a job management table including  
the job management information for each of the jobs;



5 a list transfer step of transferring a job selection list, which is created with reference to the job management table on the basis of a job selection list obtaining request from the image processing apparatus, to the image processing apparatus;

10 a page judgment result transfer step of transferring a result indicating whether or not a designated page of a designated print job is the insert page to the image processing apparatus with reference to the job management table in accordance with inquires from the image processing apparatus; and

15 an image link step of storing the image data transferred from the image processing apparatus into the memory and updating the page management information of the corresponded page so as to link the stored image data with the designated page of the designated print job.

20 19. A computer-readable storage medium which stores programs used for executing steps in a control method of an image processing apparatus, which executes predetermined image processing according to a communication performed between a scanner unit and a printer unit, capable of communicating with a server  
25 apparatus which generates image data by obtaining a print job communicating with at least one or more information processing apparatuses connected on a

network and analyzing the obtained print job,  
comprising:

an issuance step of issuing a job selection list  
obtaining request used in selecting print jobs being  
5 managed for the server apparatus;

a selection step of selecting any of the print  
jobs by displaying a job selection list transferred  
from the server apparatus in response to the job  
selection list obtaining request; and

10 a switching step of switching a print process in  
which, for each of pages of the selected print job, it  
is sequentially inquired whether or not the pages are  
insert pages for the server apparatus and an image data  
obtaining request is issued for the server apparatus in  
15 accordance with the inquired result, then print image  
data transferred from the server apparatus is output  
using the printer unit and a copying process in which  
an image input of insert originals is performed in real  
time by the scanner unit, then image data is output  
20 using the printer unit.

20. A computer-readable storage medium which  
stores programs used for executing steps in a control  
method of an image processing apparatus, which executes  
25 predetermined image processing according to a  
communication performed between a scanner unit and a  
printer unit, capable of communicating with a server

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apparatus which generates image data by obtaining a print job communicating with at least one or more information processing apparatuses connected on a network and analyzing the obtained print job, comprising:

an issuance step of issuing a job selection list obtaining request used in selecting print jobs being managed for the server apparatus;

a selection step of selecting any of the print jobs by displaying a job selection list transferred from the server apparatus in response to the job selection list obtaining request; and

a transfer step of transferring input image data to the server apparatus by executing processing in which, for each of pages of the selected print job, it is sequentially inquired whether or not the pages are insert pages for the server apparatus, and an image input of insert originals is performed by the scanner unit in accordance with the inquired result.

21. An image processing apparatus comprising:

input means for inputting data of a series of originals consisting of plural pages sent from an information processing apparatus;

control means for causing an image formation apparatus which forms images on sheets to print input originals data; and

judgment means for judging whether or not a page,  
to which information indicating an instruction for the  
image formation apparatus is added, exists in the input  
data of a series of originals sent from the information  
5 processing apparatus with a page unit,

wherein said control means sets pages other than  
the page, to which the information indicating the  
instruction for the image formation apparatus is added,  
included in the data of a series of the originals, in a  
10 state that a printing operation can be performed by the  
image formation apparatus on the basis of a judgment  
result obtained by said judgment means and causes the  
image formation apparatus to execute processing based  
on the instruction in accordance with a fact that the  
15 page judged by said judgment means is the page to which  
the information indicating the instruction for the  
image formation apparatus is added.

22. An apparatus according to claim 21, wherein  
20 said control means causes the image formation apparatus  
not to print the page to which the information  
indicating the instruction for the image formation  
apparatus is added.

23. An apparatus according to claim 22, wherein  
25 said control means executes processing aimed for  
generating data, of which state is that the instruction

added page in the original data input from the information processing apparatus is exchanged to a page of the original data from the scanner unit, as one document.

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24. An apparatus according to claim 23, wherein said control means prints data obtained by performing an exchange between the instruction added page in the original data input from the information processing apparatus and the page of the original data from the scanner unit as one document.

25. An apparatus according to claim 23, wherein said control means stores data obtained by performing an exchange between the instruction added page in the original data input from the information processing apparatus and the page of the original data from the scanner unit into storage means as one document.

26. An apparatus according to claim 22, wherein the image formation apparatus has storage means for previously storing sheets on which images were formed, and said control means causes the image formation apparatus to print the pages other than the page, to which the information indicating the instruction for the image formation apparatus is added, included in the data of a series of the originals and the sheets on

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wherein said control step sets pages other than the page, to which the information indicating the instruction for the image formation apparatus is added, included in the data of a series of the originals, in a state that a printing operation can be performed by the

image formation apparatus on the basis of a judgment result obtained in said judgment step and causes the image formation apparatus to execute processing based on the instruction in accordance with a fact that the  
5 page judged in said judgment step is the page to which the information indicating the instruction for the image formation apparatus is added.

28. A computer-readable storage medium which  
10 stores programs used for causing an image processing apparatus capable of inputting data of a series of originals consisting of plural pages sent from an information processing apparatus to execute the following steps, comprising:

15 an input step of inputting data of a series of originals consisting of plural pages sent from the information processing apparatus;

a control step of causing an image formation apparatus which forms images on sheets to print input  
20 originals data; and

a judgment step of judging whether or not a page, to which information indicating an instruction for the image formation apparatus is added, exists in the input data of a series of originals sent from the information  
25 processing apparatus with a page unit,

wherein said control step sets pages other than the page, to which the information indicating the





images on sheets characterized in that the data of a series of the originals is output to the image formation apparatus in a state that a page, to which information indicating an instruction for the image formation apparatus is added, is included together with pages used for forming images by the image formation apparatus in the data of a series of originals to be output to the image formation apparatus.

31. A computer-readable storage medium which stores programs used for causing an information processing apparatus capable of outputting data of a series of originals consisting of plural pages to an image formation apparatus for forming images on sheets to execute a step of outputting the data of a series of the originals to the image formation apparatus in a state that a page, to which information indicating an instruction for the image formation apparatus is added, is included together with pages used for forming images by the image formation apparatus in the data of a series of originals to be output to the image formation apparatus.